

## **TEXTUAL BITS – PHYSICAL SCIENCES – CLASS-10-EM – PRACTICE TEST**

1. Which of the following is a warming process [     ]  
a) Evaporation      b) condensation      c) boiling      d) all the above
2. The temperature of a steel rod is 330K. Its temperature in °C is \_\_\_\_\_ [     ]  
a) 55°C      b) 57°C      c) 59°C      d) 53°C
3. Boiling point of water at normal atmospheric pressure is \_\_\_\_\_ [     ]  
a) 0°C      b) 100°C      c) 110°C      d) -5°C
4.  $\text{Fe}_2\text{O}_3 + 2\text{Al} \rightarrow \text{Al}_2\text{O}_3 + 2\text{Fe}$ . above reaction is an example of: [     ]  
a) Combination reaction      b) Decomposition reaction  
c) Displacement reaction      d) Double decomposition reaction
5. The reaction of formation hydrogen chloride from hydrogen and chloride represents following type of chemical reaction [     ]  
a) decomposition      b) displacement      c) combination      d) double-displacement
6. If an object is placed at C on the principal axis in front of a concave mirror, the position of the image is ..... [     ]  
a) at infinity      b) between F and C      c) at C      d) beyond C
7. Magnification  $m = \dots\dots\dots$  [     ]  
a)  $v/u$       b)  $u/v$       c)  $h_o / h_i$       d)  $h_i / h_o$
8. The colour of methyl orange indicator in acidic medium is ..... [     ]  
a) yellow      b) green      c) orange      d) red
9. Colour of methyl orange in alkali conditions? [     ]  
a) orange      b) yellow      c) red      d) blue
10. If a base dissolves in water by what name is it better known? [     ]  
a) neutralization      b) basic      c) acid      d) alkali
11. The refractive index of glass with respect to air is 2. Then the critical angle of glass-air interface is ..... [     ]  
a)  $0^\circ$       b)  $45^\circ$       c)  $30^\circ$       d)  $60^\circ$
12. Total internal reflection takes place when the light ray travels from..... [     ]  
a) rarer to denser medium      b) rarer to rarer medium  
c) denser to rarer medium      d) denser to denser medium
13. Which one of the following materials cannot be used to make a lens? [     ]  
a) water      b) glass      c) plastic      d) clay
14. Focal length of the plano-convex lens is ..... when its radius of curvature of the surface is R and n is the refractive index of the lens. [     ]  
a)  $f = R$       b)  $f = R/2$       c)  $f = R/(n-1)$       d)  $f = (n-1)/R$
15. During refraction, \_\_\_\_\_ will not change. [     ]  
a) wavelength      b) frequency      c) speed of light      d) all the above
16. The process of re-emission of absorbed light in all directions with different intensities by the atom or molecule is called ..... [     ]  
a) scattering of light      b) dispersion of light      c) reflection of light      d) refraction of light
17. The maximum number of electrons that can be accommodated in the L – shell of an atom is .. [     ]  
a) 2      b) 4      c) 8      d) 16
18. The quantum number which explains about size and energy of the orbit or shell is.... [     ]  
a) n      b)  $l$       c)  $m_l$       d)  $m_s$
19. Number of elements present in period- 2 of the long form of periodic table [     ]  
a) 2      b) 8      c) 18      d) 32

20. Which of the following is the most active metal? [     ]  
 a) lithium                      b) sodium                      c) potassium                      d) rubidium
21. Which of the following elements is electronegative? [     ]  
 a) Sodium                      b) Oxygen                      c) Magnesium                      d) Calcium
22. 'A' forms a chloride  $ACl_4$ . The number electrons in the valence shell of 'A' [     ]  
 a) 1                      b) 2                      c) 3                      d) 4
23. A uniform wire of resistance  $50 \Omega$  is cut into five equal parts. These parts are now connected in parallel. Then the equivalent resistance of the combination is [     ]  
 a)  $2 \Omega$                       b)  $12 \Omega$                       c)  $250 \Omega$                       d)  $6250 \Omega$
24. Joule/ coulomb is the same as [     ]  
 a) 1 - watt                      b) 1 - volt                      c) 1- ampere                      d) 1 - ohm
25. Which converts electrical energy into mechanical energy [     ]  
 a) motor                      b) battery                      c) generator                      d) switch
26. Which converts mechanical energy into electrical energy [     ]  
 a) motor                      b) battery                      c) generator                      d) switch
27. The impurity present in the ore is called as \_\_\_\_\_ [     ]  
 a) Gangue                      b) flux                      c) Slag                      d) Mineral
28. The oil used in the froth floatation process is \_\_\_\_\_ [     ]  
 a) kerosene oil                      b) pine oil                      c) coconut oil                      d) clove oil.
29. The suffix used for naming an aldehyde is [     ]  
 a) -ol                      b) -al                      c) -one                      d) -ene
30. Which one of the following hydrocarbon can show isomerism? [     ]  
 a)  $C_2H_4$                       b)  $C_2H_6$                       c)  $C_3H_8$                       d)  $C_4H_{10}$
31. .... flows from a body at higher temperature to a body at lower temperature.
32. Speed of light in vacuum is ..... m/s.
33. The lens which can form real and virtual images is .....
34. Myopia can be corrected by using ..... lens.
35. Maximum number of electrons that an M-shell contain is .....
36. Electrons in outer most shell are called .....
37. A thick wire has a ..... resistance than a thin wire.
38. .... is the product of magnetic field induction and area.
39. Corrosion of iron occurs in the presence of .....
40. The functional group present in methanol is .....

**Match the following:(1)**

- |                      |         |                                    |
|----------------------|---------|------------------------------------|
| 41) Plaster of Paris | [     ] | A) $CaOCl_2$                       |
| 42) Gypsum           | [     ] | B) $NaHCO_3$                       |
| 43) Bleaching powder | [     ] | C) $Na_2 CO_3$                     |
| 44) Baking soda      | [     ] | D) $CaSO_4 \cdot \frac{1}{2} H_2O$ |
| 45) Washing soda     | [     ] | E) $CaSO_4 \cdot 2 H_2O$           |

**Match the following:(2)**

- |                       |         |                                  |
|-----------------------|---------|----------------------------------|
| 46) $i = r$           | [     ] | A) total internal reflection     |
| 47) $i > r$ (maximum) | [     ] | B) reflection                    |
| 48) $i < r$ (maximum) | [     ] | C) rarer medium to denser medium |
| 49) $i = C$           | [     ] | D) denser medium to rarer medium |
| 50) $i > C$           | [     ] | E) $r = 90^\circ$                |